Listing of the Claims

- 1. (Previously Presented) A surgical device for securing tissue comprising:
- a first member including a first compression element;
- a second member including a second compression element, the second member being in movable relation with the first member from a first position to a second position, wherein the first compression element and the second compression element are configured to receive a retainer therebetween:

an energy source operably-connected to the first compression element, the energy source operable for application of energy to the retainer received between the first and the second compression elements; and

an elongated insulation sleeve controllably positionable over the second member and operable for movement independent of movement of the second member, wherein the elongated insulation sleeve is further positionable to limit the application of energy from the energy source to the retainer received between the first and the second compression elements.

- (Original) The surgical device according to claim 1, further including a bias member biasing the first member and second member into the first position.
- 3. (Previously Presented) The surgical device according to claim 2, wherein the bias member imparts a compressive force of between about 1 lb. and 20 lbs. on the retainer received between the first and the second compression elements.
- (Original) The surgical device according to claim 1, wherein the first compression element is an acoustic horn.
- (Original) The surgical device according to claim 4, wherein the energy source provides ultrasonic energy.

6. (Cancelled)

- 7. (Original) The surgical device according to claim 5, wherein the ultrasonic energy is provided through an end portion of the acoustic horn.
- 8. (Original) The surgical device according to claim 1, wherein the energy source provides energy selected from the group consisting of radio frequency (RF) energy, laser energy, microwave energy, ultrasound energy, and contact heating energy.

9. (Cancelled)

10. (Original) The surgical device according to claim 8, wherein the energy source provides energy through an end portion of the first compression element.

11-13. (Cancelled)

- 14. (Original) The surgical device according to claim 1, wherein the second member is movable along a linear path relative to the first member.
- 15. (Original) The surgical device according to claim 14, wherein the second member is a tubular member including a proximal end and a distal end, the distal end having a gapped portion with the second compression element being integrated into the gapped portion.
- 16. (Original) The surgical device according to claim 15, wherein the first member is positioned through the tubular member, such that the first compression element is in opposing relation to the second compression element.

Examiner: M. Mashack

17. (Original) The surgical device according to claim 16, wherein the tubular member is

slidable over the first member.

18. (Original) The surgical device according to claim 17, further comprising an actuation

member operably connected to the proximal end of the tubular member, wherein the actuation

member operates to move the tubular member from the first position to the second position.

19. (Original) The surgical device according to claim 18, wherein the actuation member

includes a bias member biasing the tubular member into the first position.

20. (Previously Presented) The surgical device according to claim 19, wherein the bias

member imparts a compressive force of between about 1 lb. and 20 lbs. on the retainer received

between the first and second compression elements.

21. (Cancelled)

22. (Previously Presented) The surgical device according to claim 15, wherein the

elongated insulation sleeve is slidable from a first sleeve position to a second sleeve position.

23. (Previously Presented) The surgical device according to claim 22, wherein the

elongated insulation sleeve provides access to the gapped portion of the tubular member in the

first sleeve position and covers the gapped portion of the tubular member in the second sleeve

position.

24. (Previously Presented) A surgical device for securing tissue comprising:

a first member including a first compression element;

a tubular second member including a proximal end and a distal end, the distal end having

a gapped portion with a second compression element being integrated into the gapped portion.

wherein the tubular second member is movable along a linear path relative to the first member

4

from a first position to a second position, and wherein the first compression element and the second compression element are configured to receive a retainer therebetween;

an energy source operably connected to the first compression element; and an elongated insulation sleeve controllably positionable over the tubular member, the elongated sleeve further comprising a collar member configured to receive an end portion of a suture.

wherein the insulation sleeve insulates the suture from energy from the energy source.

- 25. (Previously Presented) A surgical device for securing tissue comprising:
- a first member including a first compression element;
- a tubular second member including a proximal end and a distal end, the distal end having a gapped portion with a second compression element being integrated into the gapped portion, wherein the tubular second member is movable along a linear path relative to the first member from a first position to a second position, and wherein the first compression element and the second compression element are configured to receive a retainer therebetween;

an energy source operably connected to the first compression element, wherein the energy source provides ultrasonic energy to the first compression element;

an elongated insulation sleeve controllably positionable over the tubular member, wherein the insulation sleeve is controllably slidable from a first sleeve position to a second sleeve position; and

a bias member biasing the elongated sleeve into the first sleeve position, the bias member imparting a compressive force on the retainer received between the first and second compression elements,

wherein in the first sleeve position, the gapped portion is accessible and in the second sleeve position, the gapped portion is covered by the elongated insulation sleeve; wherein in the second sleeve position, the elongated insulation sleeve insulates tissue from application of ultrasonic energy to the first compression element; and wherein combined application of compressive force and ultrasonic energy results in axial shortening of the retainer.

26-34. (Cancelled)

- 35. (Previously Presented) A surgical device for securing tissue comprising:
- a first member including a first compression element;
- a tubular member including a gapped portion configured to receive a retainer therein, the gapped portion including an integrated second compression element, wherein the tubular member is slidably positionable over the first member, such that the first compression element is in opposing relation to the second compression element;

an energy source operably connected to the first compression element to deliver energy to the gapped portion;

an elongated insulation sleeve controllably positionable over the tubular member, wherein the elongated insulation sleeve is controllably slidable from a first sleeve position, covering the gapped portion of the tubular member, to a second sleeve position, uncovering the gapped portion of the tubular member, and wherein the sliding of the insulation sleeve is independent of movement of the tubular member; and

a safety switch operably connected to the elongated insulation sleeve, the safety switch operable to prevent delivery of energy to the gapped portion when the elongated insulation sleeve is in the second sleeve position.

36. (Previously Presented) The surgical device according to claim 35, wherein the retainer is received between the first and second compression elements.

37. (Previously Presented) The surgical device according to claim 36, further comprising an actuation member operably connected to the tubular member, wherein the actuation member operates to the move the tubular member from the first sleeve position to the second sleeve position.

38. (Previously Presented) The surgical device according to claim 37, further including a bias member biasing the tubular member into the first sleeve position.

39. (Previously Presented) The surgical device according to claim 38, wherein the bias member imparts a compressive force of between about 1 lb. and 20 lbs. on the retainer received between the first and the second compression elements.

40-42. (Cancelled)

- 43. (Previously Presented) A surgical device for securing tissue comprising:
- a first member including a first compression element;
- a tubular member including a gapped portion configured to receive a retainer therein, the gapped portion including an integrated second compression element, wherein the tubular member is slidably positionable over the first member such that the first compression element is in opposing relation to the second compression element;
 - an energy source operably connected to the first compression element;
- an elongated insulation sleeve controllably positionable over the tubular member from a first sleeve position to a second sleeve position; and
 - a bias member biasing the elongated insulation sleeve into the first sleeve position, wherein the elongated insulation sleeve is further positionable to limit application of

energy from the energy source to the retainer received in the gapped portion.

- 44. (Previously Presented) A surgical device for securing tissue comprising:
- a first member including a first compression element;
- a tubular member including a gapped portion configured to receive a retainer therein, the gapped portion including an integrated second compression element, wherein the tubular member is slidably positionable over the first member such that the first compression element is in opposing relation to the second compression element;

an energy source operably connected to the first compression element; and

an elongated insulation sleeve controllably positionable over the tubular member from a first sleeve position to a second sleeve position, the elongated sleeve further comprising a collar member configured to receive an end portion of a suture,

wherein the elongated insulation sleeve is further positionable to insulate the suture from application of energy from the energy source.

45. (Previously Presented) The surgical device according to claim 35, wherein the first compression element is an acoustic horn.

46. (Original) The surgical device according to claim 45, wherein the energy source provides ultrasonic energy.

47. (Cancelled)

- 48. (Previously Presented) A surgical device for securing tissue comprising:
- a first member including a first compression element;

a tubular member including a gapped portion configured to receive a retainer therein, the gapped portion including an integrated second compression element, wherein the tubular member is slidably positionable over the first member, such that the first compression element is in opposing relation to the second compression element;

a bias member operably connected to the tubular member, the biasing member biasing the tubular member into a first position and imparting a compressive force of between about 1 lb. and 20 lbs. on the retainer received by the gapped portion between the first compression element and the second compression element;

an ultrasonic energy source operably connected to the first compression element; and an elongated insulation sleeve controllably positionable over the tubular member, wherein the elongated insulation sleeve is controllably slidable from a first sleeve position, covering the gapped portion of the tubular member and positioned to limit application of energy from the energy source to the gapped portion, to a second sleeve position, uncovering the gapped portion of the tubular member, and wherein the sliding of the insulation sleeve is independent of movement of the tubular member.

49-51. (Cancelled)

- 52. (Previously Presented) The surgical device according to claim 1, wherein a proximal end of the elongated insulation sleeve includes a channel for engaging a pin positioned on the second member, and wherein the channel and the pin cooperate to control a range of motion of the sleeve over the second member.
- 53. (Previously Presented) The surgical device according to claim 24, wherein a proximal end of the elongated insulation sleeve includes a channel for engaging a pin positioned on the second member, and wherein the channel and the pin cooperate to control a range of motion of the sleeve over the second member.
- 54. (Previously Presented) The surgical device according to claim 25, wherein a proximal end of the elongated insulation sleeve includes a channel for engaging a pin positioned on the second member, and wherein the channel and the pin cooperate to control a range of motion of the sleeve over the second member.
- 55. (Previously Presented) The surgical device according to claim 35, wherein a proximal end of the elongated insulation sleeve includes a channel for engaging a pin positioned on the tubular member, and wherein the channel and the pin cooperate to control a range of motion of the sleeve over the tubular member
- 56. (Previously Presented) The surgical device according to claim 43, wherein a proximal end of the elongated insulation sleeve includes a channel for engaging a pin positioned on the tubular member, and wherein the channel and the pin cooperate to control a range of motion of the sleeve over the tubular member.

Applicants: P. Bonutti et al. Application No.: 10/779,978 Examiner: M. Mashack

57. (Previously Presented) The surgical device according to claim 44, wherein a proximal end of the elongated insulation sleeve includes a channel for engaging a pin positioned on the tubular member, and wherein the channel and the pin cooperate to control a range of motion of the sleeve over the tubular member.

58. (Previously Presented) The surgical device according to claim 48, wherein a proximal end of the elongated insulation sleeve includes a channel for engaging a pin positioned on the tubular member, and wherein the channel and the pin cooperate to control a range of motion of the sleeve over the tubular member.